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PSORIASIS.

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BY JAMES C. WHITE, M.D.

THIS is a disease characterized by such marked peculiarities that it seems hardly possible that confusion should ever have arisen with regard to it, and yet we find that in consequence of the tendency which has prevailed among writers of all nations upon cutaneous diseases, both ancient and modern, to study their superficial appearances alone, without regard to their pathology, it has been not only confounded with other affections, but described as two distinct diseases, even down to the present day. Hippocrates and Galen seem to have used the term Psoriasis, in common with Lepra, Alphos and Lichen, to designate any squamous disease, although the Arabian physicians applied the former term to a much more serious affection. By Celsus it was called Impetigo. In the middle ages, and down to the days of Willan, it was customary to describe any particularly obstinate and extensive disease of the skin as a species of Lepra. That author, however, first recognized and described the real nature of the disease we are considering, although he committed the unfortunate error of dividing it into two separate affections, calling that form characterized by circular spots Lepra (in deference to the opinion of Paul of Aegina), and the other, in which the patches are of irregular shape, Psoriasis, to distinguish it from Scabies, to which the term Psora was also attached. It is evident, however, that under this last-named title he also included certain morbid conditions of the skin, which, although scaly, were in no way connected with the disease in question, such as the so-called Pityriasis rubra and chronic Eczema, and this mistake has led to endless confusion among nearly all dermatologists to this day. Among the French, Biett, Rayer, Cazenave, Gibert, and Devergie have accepted his nomenclature and treated of Psoriasis under two heads, although Alibert, and lately Hardy and Bazin, have maintained that the two diseases are one and the same, and that the word Lepra should be reserved for the frightful disease it first represented. In England, also, even in Willan's day, objection

VOL. LXXIII.—No. 16

was made to this arbitrary and unwarranted division, although the later writers, with few exceptions, have followed the same unphilosophical course. Wilson has hitherto adopted a similar classification, using the word Lepra to signify the pathological processes we are considering, and attaching a very indefinite meaning to the term Psoriasis, but still continuing to use it in this sense, although apparently convinced of the impropriety of so doing. In the preface to his last edition, however, which was evidently written after the volume was in press, and after he had fallen under the powerful personal influence of one who has always endeavored to simplify both the classification and treatment of skin diseases, and to whose teachings, also, I am largely indebted for the history and description of this affection, we find the following in relation to this subject, which is entirely at variance with the opinions expressed in the book itself:—

"Those who have honored me by perusing my writings and following my inquiries, may not have noted the difficulty which I have experienced in dealing with the word 'psoriasis.' To clear away, therefore, the confusion occasioned by the misuse of this term, I recommended its abolition, or, at the least, its application solely to the chronic eczema above noted. But it may very properly be asked, Why call eczema by any other name than its own? I can only answer, that I have done so heretofore in deference to authority, and to a widely-spread custom. Perhaps the moment has come, and I hope it has, when a better, and possibly the proper use of the term may be recognized.

"To return to Hebra. The term Lepra—*der Aussatz* in German—signifies *the* eruption, the great eruption. It is synonymous with Leprosy, *the* leprosy, the ancient leprosy, that which has since been called elephantiasis. Therefore let us bestow the term lepra where it rightfully belongs, or reject it altogether. The trivial affection which we at present call lepra has no single point of comparison with leprosy. We cannot but admit the truth of this argument, and we cannot, also, but recognize in an instant the monstrous absurdity of calling a comparatively insignificant disease by so portentous a name.

"Now, Hebra cuts the Gordian knot. Eczema he calls eczema; lepra, lepra; and that very common affection which we at present term lepra, he calls psoriasis. The change is simple, the reasons for it important. We cannot do better than adopt it. Moreover, it suits the spirit of the British bull-dog to call things by their proper names, and we are too noble in our nature not to recognize and value the intellect of our foreign brethren. The great International Exhibition of 1862 will not have existed in vain, if it have accomplished no more than to enable us to give the proper name to a very common and troublesome disease."

Within a few months, however, he has published a new work on skin diseases, called the "Student's Book of Cutaneous Medicine," in which he retains the name Psoriasis for a form of chronic Eczema, but calls Psoriasis, his former Lepra, Alphos.

The modern German dermatologists, as Fuchs, Simon and Bärensprung, have always insisted upon the unity of the forms described

as Psoriasis and Lepra, and Hebra, as early as 1841, explained the way in which the circular form, supposed to be characteristic of Lepra, was developed in the course of Psoriasis, simply by the peculiar grouping and retrogression of the eruption upon certain portions of the body.

Description and Course.—The characteristic appearances of Psoriasis are briefly these:—Isolated conglomerations of dry, silvery-white, imbricated scales, mostly round or in the form of curves or sections of circles, varying in size from a minute point to a silver dollar, or larger, and situated upon slightly elevated bases of the same form and of a deep red or coppery hue, resembling that considered to be peculiar to syphilitic eruptions. The scales, though adherent, are readily removed by the nails, and leave surfaces exposed, which bleed easily from minute points. The skin between the points or patches of eruption is in every way normal. Such are the appearances which meet our eye at first sight in all cases of Psoriasis, and in no other cutaneous affection is there the same uniformity of course and history, although if we were to take into consideration the many varieties or species which are described by certain authors, a student might indeed consider it difficult of recognition.

We cannot too strongly insist upon the folly of this fashion of dividing one simple disease into many varieties, according to the particular form it may assume at various stages of its progress. It is the chief cause of the imaginary difficulties which surround the study of this important branch of medicine, and only gives rise to confusion. Each new writer seems to think it his duty to invent new names for new varieties, instead of directing his efforts, where they are most needed, towards advance in etiology and treatment, apparently ignorant of the great truth that perfection in all classification is simplicity. Under this disease, for instance, we hear of Psoriasis punctata, guttata, alphoides, nummularis, scutellata, orbicularis, annulata, circinata, vulgaris, gyrata, circumscripta, diffusa, confluens, discoidea, centrifuga, imbricata, figurata, inveterata, and so on indefinitely. Now it would be quite as sensible to take a photographic picture of every individual case and label it according to the surname of the patient as a distinct variety, as to make use of the above system of nomenclature. There were never two cases of Psoriasis exactly alike, and in every case we may find several of the appearances present at the same time, which have been described as separate varieties, or else succeeding each other, so that we neither know which of the names is the most appropriate, nor but that our choice to-day may be a misnomer to-morrow.

In the beginning we notice minute points, isolated, slightly elevated above the surface of the skin, of a dull red, coppery or brick color, generally situated about the hair-follicles, or little prominences tipped with a shining white cap, which are epithelial cells, and which,

if removed, exhibit hyperæmic bases. They may be distributed over every part of the body, spreading from several points as centres, and appear in rapid succession. The eruption looks very like drops of candle-grease stiffened upon the skin, or as if the patient had been spattered with mortar or plaster. We have now before us the stage called by authors *P. punctata* or *guttata*, according to the size of the individual spots. The disease, however, does not stop here. Fresh points appear continually and increase in size, as do those which preceded them. If, however, this process went on unchecked, it is apparent we should have the whole surface of the skin completely hidden in time, either by the peripheral growth of the older or by the occurrence of new eruptions, so that the disease could eventually increase only in thickness. Such a state, however, is never seen; there always remain interspaces of healthy skin. After attaining a size varying from that of a dime to that of a half-dollar, their growth often ceases, and they may remain in this condition weeks or months unchanged, if left to themselves. (*P. circumscripta*, *nummularis*.) The first retrogressive step shows itself at the point where the disease is oldest, that is at the centre of the patch. There the white epithelial scales become thinner and fall off, leaving the skin of a reddish tinge. The scales, however, still remain upon the raised periphery, which presents bold and prominent edges. (*P. scutellata*.) If the disease continue to yield, the redness finally disappears from the centre, and we then have healthy skin covered with circles of greater or less circumference of elevated scales. (*P. vulgaris*, *annulata*, *orbicularis* of Wilson and Willan.) Then the rings begin to break away at some point, or by spreading peripherally run into contiguous patches, which are undergoing the same metamorphosis, and disappear at such points of contact according to a general law in such cases. In this way we may have all sorts of shapes pictured out on the skin, circles and their segments, tortuous, geographical and astronomical outlines of endless variety. These also increase in size peripherally, and remind one of the sweeping and ever-changing march of the ignited carbon on the chimney-wall. (This is *P. gyrata*, *figurata*, and so forth.) Finally, they may become smaller day by day, and disappear entirely. In other cases, however, the efflorescences continue to increase peripherally without fading in the centre, and melt into each other, giving rise to large patches of diseased skin of very irregular shape and size, almost covering large portions of the body. When existing for a long time, the cutis beneath the patches undergoes changes, which in time produce new appearances. The papillæ become enlarged by infiltration, and generate scales of great toughness with surprising rapidity. The skin becomes dry, harsh, thickened and fissured with cracks, so that at times the motion of the joints is very painful. When scratched off the scales are rapidly formed again, and the operation is always followed by excoriations and bleeding. (*P. diffusa*, *inveterata*.)

At times the fresh eruption of Psoriasis has the appearance of true vesicles, so that some authorities state that it is sometimes a vesicular disease. The quantity of fluid, however, collected beneath the epidermis is very slight, too little, in fact, to deserve the name. With this exception, the eruption of Psoriasis is as we have described it in all its stages. We never see any formation of crusts, of pus, of scars, or of pigment deposit, nor the pustules and ulceration which accompany those forms of syphilis that resemble it somewhat in other respects.

Psoriasis is, unfortunately, a true chronic disease, lasting for months, years, or a whole life-time. Under proper treatment it may be made to disappear and leave no trace behind, and the patient may remain free from it for months, or two, three or even ten years, but it is sure to return, and generally with increased vitality. Whatever means we may employ, or however rapid and perfect the temporary cure, it seldom fails to repeat itself at irregular intervals through a life-time, however long.

Anatomy.—Minute anatomy throws but little light upon the pathology of psoriasis. If we examine a perpendicular section of one of the efflorescences, we find merely laminated masses of epithelial cells, and below them the papillary structure of the cutis, upon which they rest, in its normal condition. The red color and elevation of their base vanish completely after death, leaving nothing but scarcely noticeable collections of dry scales; and all we know of its real nature is what we have learned by external observation, viz., that Psoriasis is a circumscribed, excessive formation and collection of epidermal cells situated upon hyperæmic papillæ.

Seat.—Although in the majority of cases this disease first shows itself by a general sprinkling of the peculiar points of eruption over the whole body, yet in other cases it not only begins at certain points, but manifests itself nowhere else. These favorite and long-cherished positions are the elbows and knees. It likewise finds a convenient lurking place upon the head, not confining itself, however, to the hairy portions of the scalp, but revealing its presence by an ugly red border upon the forehead, ears and neck. In these cases the hairs generally remain unaffected, both in color and moisture, although they occasionally fall. It is rare, however, that the disease confines itself to this or any locality, although several varieties are described according to the particular portion of the body affected. There is, in fact, but one part of the external surface which is entirely exempt from its manifestations, and that is the lips, although Willan mentions a *P. labiorum*. Upon the palms of the hands and soles of the feet also it very rarely shows itself, whereas these localities are peculiarly the seat of syphilitic eruptions, which from their anatomical nature exhibit appearances so like Psoriasis as to be called *P. palmaris syphilitica*. When confined to these parts alone, we may be almost sure that we have syphilis and not Psoriasis be-

fore us. When we consider the intimate anatomical relations between the epidermis and the tissue of the nails, we should expect them to share in the changes which the former undergoes in this affection, and we find, accordingly, that upon some of the fingers and toes they become thick, lustreless, uneven, yellow or brown, and jagged at their free extremities. In some instances, even before the nail is affected, and while still transparent, we notice the well-known points of efflorescence forming beneath it, upon the matrix itself, that occur upon other portions of the skin. Some authors state that the eruption affects the extensor in preference to the flexor faces of the limbs, but careful observations directed to this point in a very numerous series of cases would seem to show no foundation for this common belief.

The *subjective* symptoms which accompany the external manifestations hitherto described are not of much importance. It has often been said that Psoriasis gives rise to no itching, but this is not the case. Compared with that which accompanies Eczema, Prurigo and other cutaneous affections, it is indeed slight, but every case is attended by a greater or less degree of it, generally in proportion to the amount of fresh efflorescence, and sometimes, in the beginning of the disease, of sufficient severity to deprive the patient of sleep. In these cases we often find in place of, or mingled with the silvery-white scales, brown or black crusts of dried blood produced by scratching, but in the non-progressive or retrogressive stages this symptom is scarcely at all troublesome. It not unfrequently happens, moreover, that some degree of inflexibility of the limbs arises in consequence of the stiffness of the skin around the elbows and knees, or that the motions of the hands and feet are interfered with from the same cause, although the great majority of so-called cases of Psoriasis of the hands are simply chronic Eczema. An occasional complication, also, is a slight degree of neuralgia in the fingers and toes, and in old cases of indigestion, but as a rule Psoriasis affects persons in sound health, and may remain by them through life without interfering with any functions of the body.

Etiology.—We know almost nothing of the causes of Psoriasis. It attacks persons of the most robust health and best constitution, and accompanies them through life, with intermissions, uninfluenced by the many changes of their outward circumstances. Should they, however, undergo any long or serious illness, the affection disappears, like a false friend, for the time, returning as soon as health and strength are restored. It is seldom seen upon individuals affected with any other chronic disease. Prof. Hebra has known of but one instance of its occurrence with tuberculosis. It rarely appears before the age of six, and in the majority of cases first shows itself between the ages of 15 and 30. Sex, station, mode of life and temperament are alike without influence over it, and it is found all over the world. As far back as medical history goes, we read accounts

of it, and it formed one of the kinds of Leprosy mentioned in the Bible. The time of the year is also powerless over the changes it assumes, and the same may be said of the use of alcoholic drink upon its production, for, as we have seen, it is as common in the female as in the male sex. It is not contagious, but is in the majority of instances hereditary, not unfrequently jumping one generation and appearing in the following. So many and varied are the causes, however, which have been assigned for its production by dermatologists, that the mere cataloguing of them renders the whole list a necessary absurdity. Among these the only ones which from the reputation of their authors deserve any consideration, are those of Hardy and Bazin, of Paris, and Wilson, of London. The former, like the French school in general, start with the preconceived and entirely arbitrary view, that there can be no pathological process without a diathesis, which is Greek for the old "humoral" theory. Accordingly they recognize, among others, a diathesis dartreuse or herpetic, which manifests itself upon the skin, they say, by lesions differing in their elements, not contagious, often hereditary, reproducing themselves in a nearly constant manner, accompanied by itching as their principal symptom, disposed to spread, chronic in their course, and healing without scars, though sometimes attended by ulceration. In this class they include Lichen, Eczema, Psoriasis and Pityriasis. Eczema is a moist dartre, Psoriasis is a dry dartre. Now it is perfectly proper to invent a general name in an artificial system of classification, and to group under it as many affections as their common appearances will allow, but it should always be remembered that such systems are founded upon resemblances and not upon affinity in anatomy or pathology. Such systems may perhaps be excusable on the ground of convenience, however unscientific, but they should never be allowed to influence us in our consideration of the real nature of the diseases included under them. We have no evidence of the existence of any such so-called vice of the economy as the dartreuse. We might invent twenty imaginary diatheses, and no one could prove their impossibility, but it is entirely unphilosophical to apply an arbitrary name to a group of distinct pathological manifestations, and then explain their occurrence by the very ideal cause of our own creation. Bazin goes still farther, and to the scrofulous, syphilitic and dartreuse he adds a hypothetical *arthritic* diathesis, which with him plays an equally important rôle with the dartreuse in the production of cutaneous affections, so that instead of one Eczema and one Psoriasis we now find well-marked forms of each described under separate divisions in his recent work. Processes such as rheumatism and gout being well known, we may attach some meaning to the so-called arthritic diathesis, although there is no possible connection between them and Psoriasis, but we are not the fortunate possessor of a physical sense which recognizes the existence of a Dartre. As to the opinion expressed by Mr.

Wilson that the leprous poison is in its essence and origin syphilitic, modified by transmission through several generations, we hardly know what to say, except that not a shadow of proof exists for such a statement, which might not be as well applied to every affection to which our flesh is heir. Indeed, we could hardly select a disease to which this unphilosophical style of reasoning would be less appropriate than to Psoriasis, for not only does it by preference affect those in the most robust health, and first manifest itself at an age far more advanced than that in which hereditary syphilitic forms of all descriptions show themselves, but it is entirely unaffected by such remedies as are found to be most effectual against the spread of the latter, and may exist for years without producing the slightest degree of cachexia. Nor should it be forgotten that both the so-called primary and secondary forms of syphilis may run their course at the same time with Psoriasis without affecting the development of the latter in the least.

Prognosis.—We have already seen that the appearances presented by the disease change from day to day as the old patches run their course, and as new eruptions come out and imitate their example. These changes are of value in forming our prognosis, and should be watched accordingly. When upon an individual suffering from Psoriasis we find the large and irregular patches merely without any minute and fresh points of eruption, we may be sure that he will soon be free from his trouble. If, however, we see signs of recent activity, even when mixed with the old forms, such as *P. gyrata* or *figurata*, we may surely predict a longer continuance of his difficulty. Therefore when we have a case to treat, and find the larger patches rapidly disappearing under our efforts, we shall deceive both ourselves and patient with false hopes if we prophesy a speedy cure, unless the fresh eruption disappears in the same degree, and is prevented from showing itself anew. It can never be predicted, however, when a relapse will occur, how long it will continue, or how long after its disappearance the patient will remain free from its attacks. Cases of general Psoriasis, when the efflorescences are separated by minute portions only of healthy skin, are often very obstinate, if not incurable. It should be remembered, also, that cases of apparently mild character may all at once assume great activity and change into the worst known forms.

Treatment.—The innumerable host of remedies recommended in the treatment of Psoriasis from ages past down to the present time, illustrates better than anything its obstinacy and incurability. For us it will be enough to consider here only those which are most in use at the present day, and which are advised by the highest authorities. They may be divided into the internal and local, but before considering these in detail, we wish to say a few words in relation to the old and generally-received opinion regarding the absolute necessity of some kind of internal treatment in all diseases of the skin.

This no doubt originated in the humoral pathology of former days, which still finds expression in the popular belief that such diseases should not be "driven in" or allowed to "strike in." Without intending to deny that many constitutional diseases may exhibit themselves in some manner by sympathetic cutaneous symptoms, we maintain that the skin in itself is a great and complex organ, and is as liable as the lungs, liver and kidneys to individual diseases, and moreover that the results of *local* treatment prove that it is a fallacy to believe that skin diseases are merely indications of some deeper-seated malady or blood-change, requiring accordingly constitutional remedies. We believe that it is in rare instances only that the ordinary chronic affections of the skin stand in any relation to the general health that we can distinctly recognize. In this connection we would introduce an extract from the latter part of the preface of the last edition of Wilson, a writer who has always insisted upon the necessity of constitutional treatment:—

"That certain diseases obviously proceed from a local cause, and are in their essence local diseases, and independent of constitutional influence, is a truth which has been strongly impressed upon us by the celebrated dermatologist of Vienna, HEbra. Many cutaneous diseases which in this country, and with our humoral tendencies, we should be led to treat by constitutional as well as by local means, Professor Hebra would treat by local means alone, and the great success of his treatment leads us to inquire at what point between the two extremes the truth lies concealed. I believe that our lesson will be best learned by devoting more attention than heretofore to local treatment; and not less to constitutional treatment. The great excellence of the treatment of disease in England depends upon the proper appreciation of its almost universal constitutional origin. During his late stay in London, Professor Hebra honored me with his presence in my consulting-room on several occasions, and has left on my mind an ineffaceable impression of his rapid and sound diagnosis, and his extraordinary tact in the local management of cutaneous diseases. He is too sound a physician to reject constitutional means; but he declares that they are much less needful than is believed by us, and that a very considerable number of diseases are local in their nature, and may be perfectly cured by local remedies."

We should remember, moreover, that in the same degree with which the skin is disposed to the reception of contagions and virus of various kinds, with the same facility will it admit the entrance into the general economy of remedies. The celerity of the inoculation cure in syphilis, the black stools and urine after the general application of tar compounds, and the easy chemical recognition of iodine in the secretions after its external use, are familiar examples of this truth. Local treatment also enables us to bring in direct contact with the diseased tissues the substances we wish to employ, and to study directly the changes they effect, while it leaves the stomach and intestinal canal to perform their important functions in peace.

Among the *internal* remedies, arsenic enjoys the highest reputation in this, as well as in most other chronic diseases of the skin. It possesses the power of causing the eruption to disappear in the majority of cases, although a long period of time is generally necessary to effect this. The objections to its use are this slowness of action and the specific toxicological symptoms which sometimes follow its most carefully watched employment. It should be administered upon a full stomach, and rather during the meal itself than before or after it. The preparations which are employed are Fowler's solution (arsenite of potash), Pearson's solution (arsenite of soda), Donovan's solution (containing arsenic, mercury and iodine), and the Asiatic pills (arsenious acid and pepper). The first of these, which contains about one grain in seventy drops, is used by Prof. Hebra in the following manner: six drops are given before meals and increased by one drop every second day, unless counter-indicated, until twelve drops are reached. This will generally produce some action upon the eruption. The quantity of scales upon the patches are diminished, the red color of the spots becomes paler or is changed to brown, and the itching subsides. In case no improvement is noticed, the dose must be increased at intervals of four days until twenty drops are reached, or, if this is insufficient, even up to thirty drops (one third of a grain of arsenic). At whatever point improvement is noticed, we should continue at that dose until the red spots have either entirely disappeared or have become brown, or until all fresh appearances have ceased. After this the dose may be gradually diminished to the quantity started with. Prof. Hebra has employed it thus for many months, often exceeding two thousand drops, without seeing any evil results follow. Pearson's solution is given in doses of fifteen drops, and has the advantage of a simple composition, and of being very easily borne. The Asiatic pills, containing .08 of a grain, are also a convenient form of administering arsenic. Generally three during the day are sufficient, but in obstinate cases Hebra has increased this number to twelve, or 0.9 of a grain, and has continued their use till 2000 have been taken, a number which represents 160 grains of arsenious acid. The largest experience teaches that whichever of these forms is employed the same results are obtained, namely: the probable disappearance after an indefinite time of the efflorescences, but with all of them, even when administered in their largest doses, new patches may appear at the very time the older ones are vanishing. However completely the disease may appear to yield to them, it will return.

Formerly tincture of cantharides was much used, and is even now recommended by Hardy. It is to be given in increasing doses until its specific effect is produced upon the kidneys. If as many as thirty drops are given daily, strangury is produced, and the urine becomes albuminous and bloody. In the thorough trial given to this

remedy in the Vienna clinic, these were the only results obtained. It had no effect whatever upon the Psoriasis. In no case did it act as an aphrodisiac.

Antimony, iodine, lead, mercury, baryta, tar, copaiba and many other substances have been tried and found useless. The continued use of laxative medicine will cause the eruption to disappear for a time, as it will that of many cutaneous affections, including the syphilitic, and it is on this account that the mineral waters are advised in this disease. The cure, however, is but temporary, lasting only as long as the exhibition of the saline cathartics is continued.

External.—We have seen, then, that we may not cure Psoriasis by any form of internal treatment whatever; we may only banish it for an uncertain period, at the end of which it returns with all its old vigor. We have seen, too, that arsenic is the only internal remedy capable of accomplishing even thus much. Let us now see what and how much we may effect by the use of topical applications. Starting with the theory that the disease is an abnormal development of the epidermis, we would naturally call to our assistance such substances as hasten the separation of the old and the formation of new and healthy epidermal cells; the same set of remedies, in fact, that we find so useful for similar purposes in other chronic affections, as Eczema, Prurigo, &c. These are water, alkaline soaps, tar and sulphur preparations.

Baths of all kinds help us on a little in conjunction with the applications about to be mentioned, but they must be used thoroughly. It makes but little difference about their temperature or chemical nature, if we avoid those which excite an eczematous condition of the skin. In Louèche, Switzerland, there are natural baths, which persons with Psoriasis frequent. At the end of the season, after having spent two hours of every day in their waters, they go home with fair skins, but the relief is temporary, and spring generally finds them spotted once more and waiting for the opening of the fountains. Prof. Hebra has recently invented a so-called continual bath for the treatment of extensive burns of the skin, and patients with this disease were kept in the same for more than one hundred days, and with very little effect upon it.

The well-known action of alkalies upon the skin would naturally suggest the use of soap in Psoriasis for the purpose of washing off the collection of effete epidermal cells, and we find that very good results may be obtained if we make use of the proper kinds. Those made of soda are almost inert, but those in which potash is used as a base exert a very powerful solvent action upon the epidermis. It is on this account that *sapo viridis*, or *schmier seife*, is used so commonly in Germany in this affection. This substance is made in various parts of that country, and its formula may be approximately expressed by caustic potash, solution of s. g. 1.33, one part, whale oil two parts. Good specimens are not always obtainable, nor is it

easy to manufacture it properly in the laboratory. It is somewhat thicker than honey, of an olive-green or brown color, of uniform consistence, and sharply alkaline, though not caustic taste, without solid ingredients when rubbed between the fingers, has no rancid odor, and is entirely dissolved by alcohol. In cases where the disease is confined to certain portions of the body, it will be enough to rub such twice a day with the soap, and, if necessary, to make cold-water applications subsequently to prevent excoriations. In cases where it is of long standing and affects the whole body, it is better not to wash away the soap, but, after applying it thoroughly, to put the patient to bed wrapped in blankets. It may be applied also as a fomentation, by spreading it thickly upon a piece of flannel, and binding this upon the affected parts. In this way we may treat a patient who desires to continue about his business, or who is unwilling to remain in bed. The cloths should be freshly smeared every night, and then bound on again. After twelve applications morning and evening, or after the bandages have been worn six days, we give the patient a day of grace for the purpose of healing any excoriations that may arise in consequence of the treatment, and to see if a healthy epidermis will take the place of the former scales. Some persons will not endure so long a course as this, and certain portions of the body should always be avoided by the bandages, on account of the eczema and stiffening produced by the undue application of the soap to such parts. The patient, therefore, should be carefully watched from day to day, and when this is impossible Prof. Hebra advises that the diseased patches should be rubbed with the soap morning and evening, or to make use of the bandages freshly smeared on the first three days of the week, and to leave them unchanged during the last three. If at the end of our six days' labor we have not fully accomplished our object, we must repeat the process on the following week. Schmier seife is particularly valuable in this disease, however, for the removal of the masses of epidermal cells which protect the tissues at fault preparatory to the employment of other remedies, or in conjunction with them. It is more efficacious in Psoriasis of the scalp than in any other form, and generally will cause its disappearance in a short time. A more convenient way of applying it is to make a strong solution in alcohol, two parts of the soap to one of spirit, to which a perfume may be added if desired, and which is an extremely useful agent in many cutaneous affections.

The use of tar in cutaneous diseases was known in the days of Pliny and Theophrastus, but was forgotten for centuries, to be resumed in our time as one of the most valuable remedies in the treatment of these affections. It is, as is well known, an empyreumatic oil obtained by dry distillation from various woods, of which the following forms are those principally used in medicine:—*Ol. cadiatum*, from *juniperus oxycedrus* of Southern Europe, *ol. fagi* from

the white and red beech, ol. rusci or ol. betulae from the bark of the birch, and the common tar of the Southern pine. They all possess nearly the same penetrating odor and dark color, and their action upon the skin is likewise uniform. The ol. rusci, however, possesses the advantage of a more agreeable odor than the others, it being the source of the pleasant smell of Russia leather. They may all be used alone or in combination with lard, glycerine, soap or alcohol. Although these preparations may be generally used upon limited portions of the skin with no unpleasant effect, patients are occasionally met with in whom a single application produces a redness and swelling, which terminates in true erysipelas. Again, there are those who bear the application well for a time, but upon whom an inflammation of the hair-follicles, a specific tar acne, is finally developed. Should large portions of the body, however, be rubbed simultaneously with them, quite a different series of symptoms is produced. In a space varying from half an hour to three or six hours, vomiting of a black fluid ensues, or black faeces and urine, nearly the color of ink, are passed, which have a strong tarry odor, and leave no doubt that these substances have entered the circulation. Accompanying these appearances other symptoms, such as fever, nausea, constriction of the head, appear, but they are not of long duration, and never cause serious trouble. When used in this affection, they should be applied with a small brush every evening to the parts diseased for several days, and then omitted for a few, till the crust formed by their application falls off, when they are to be resumed. Better progress will be made, however, if we combine schmier seife with the tar. First give the patient a warm bath, then rub the skin with the soap, and after its removal apply the oil of cade. We may in some cases mix the two substances with advantage, as in the following recipe:—Sapon. virid., ol. cadini, aa 3 i.; alcohol, 3 ij. M. This is to be applied after a bath every evening. The tar which accumulates upon the skin should be removed every few days by the means of oil and soap.

In cases where we cannot make use of either of the above remedies, an ointment of either proto- or deut-iodide of mercury, of the first a scruple, of the second ten grains to the ounce of fat, may be employed. It may under certain circumstances be desirable to remove the diseased patches, from the face, for instance, without delay. This may be done by applying a solution of corrosive sublimate, five grains to the ounce of alcohol, by which the epidermis is rapidly removed, leaving the skin fair beneath the blistered surface. The effect, however, lasts but a short time, and the operation is a painful one.

Vleminckx Solution.—Lately a new remedy has been introduced in the treatment of Psoriasis, which is far more valuable than any of those hitherto mentioned: namely, the so-called Vleminckx solution. It is prepared by boiling two parts flowers of sulphur with

one part caustic lime in twenty parts water down to twelve parts, when it is filtered, and we have a bright orange-colored, bad-smelling liquid. Its only disadvantage is its nauseous odor, which can be effectually hidden by the addition of a little oil of bergamot, but its curative action is so evident that the most delicate lady does not object to its use. Every portion of the skin affected is to be rubbed energetically with a flannel wetted with the preparation till the masses of epidermis are removed, and a slight bleeding shows that the deepest portions of the cuticle are reached, and the papillæ laid bare. The patient is then to be placed in a warm bath, where he remains an hour. The skin is then to be washed with simple cold water to remove the sulphur, and to be rubbed with some fatty substance or a weak tincture of cade, by which all unpleasant symptoms and sensations are prevented. This is to be repeated every night until the disease is removed.

We may conclude, therefore, that Psoriasis is a disease which we are entirely unable to cure radically, either by internal or external treatment. We may by the long-continued use of arsenic drive it away. We may produce the same effect by local applications in a short time. The cure is the same in both; is as permanent in the one case as in the other. It may perhaps be advantageous to combine both methods in some particularly obstinate cases, but as a rule the local measures may be considered far superior to arsenic in point of rapidity of action, and never produce any injurious effects.

SEWERS AND THEIR EVILS.

THE immense extent of the London system of sewerage probably converts the sewers into one enormous cess-pool. It was, of course, the decomposition of the animal excrements which gave rise to the dangerous vapors issuing from the cess-pools. Now, if these excrements are allowed, in consequence of the length of the sewers through which they now have to pass, to decompose, as they decomposed in the ancient cess-pools, why should not the vapors and gases arising from the decomposition in the sewers produce as noxious effects as they produced when they escaped from the cess-pools? We some years ago suggested this question, Whether our present system of sewage would not become one enormous cess-pool; and whether some special provision ought not to be made for the escape, by high shafts, or neutralization of the products of decomposition. If it be true that the contents of our sewers in London undergo decomposition just as they underwent decomposition in the old cess-pools, surely it was something akin to madness to set loose all the products of the decomposition at our very doors and under our very noses. But all this matter requires investigation; and interesting would it be, if we could get some sure information as to the ordina-

ry health of those men who pass many hours in these sewers, and whom we occasionally see emerging from iron traps, with lantern and heavy jack-boots. What effect does the inhaling of the vapors of sewers have upon them? Perhaps some of our readers can tell us something of this; and we may add, that we wish Dr. Fuller had furnished the *Times* with some positive proof that the issue of gases from sewers had injured human constitutions and produced diseases.

Dr. Miller, Professor of Chemistry in King's College, says truly enough, that sewers must be ventilated—i. e., the gases must be let out of them—so long as it is necessary for men to pass through them; and he recommends the process of ventilation and disinfection proposed by Dr. Stenhouse.

It consists in suspending charcoal in the ventilating openings. In London, the plan has been carried out by the engineer to the Commissioners of Sewers, with the sanction of Dr. Lethaby; and both these gentlemen have reported strongly in its favor. There is placed in each ventilating opening a box, within which are three or four perforated shelves, and on each side of these shelves is a layer of wood charcoal; openings are made at the top and bottom of the box, to allow the free passage of the air; the whole of the air which escapes from the sewer is obliged to pass through the box and over the charcoal before it reaches the outer atmosphere. The offensive and noxious gases are speedily absorbed by the charcoal, and are oxidized within its pores, by which means they are converted into a harmless substance, destitute of odor. "The method is so simple and effectual," says Dr. Miller, "that it ought at once to be put in practice, while yet there is time." * * * * *

Dr. Herbert Barker, who has proved himself to be a high authority on the subject of disinfection, speaks of ozone as being "Nature's grand atmospheric disinfectant." His observations are of much interest, and the practical conclusions recommended worthy of consideration, especially in reference to this matter of the cholera. We conclude that Dr. Barker has satisfactory proofs of the fact that ozone is really absent in the district where cholera rages, &c. Of course, the full establishment of this fact is very important.

"In the neighborhood of cesspools, all evidence of the presence of ordinary atmospheric ozone is lost. When ozone is abundant in the air, it may be detected on the windward side of a stable, or cow-shed, or manure-heap, but not on the leeward side. It may be observed abundantly immediately on the windward side of a town, and not a trace of it discovered at the same time on the leeward side. The ozone test paper, in an ill-ventilated church, when full of persons, will give no reaction. I have evidence from my own experience that the diffusion of ozonized air through the apartments of persons suffering from fevers, is of immense service, in that it keeps the room free of oppression, and effectually destroys the offensive

odors arising from the gaseous excreta of the subject. Ozone, in its action as a deodorizer, closely resembles chlorine. It can be employed permanently by a single process with ventilation. Ozone may be prepared by Siemen's cylinder, the air driven through the cylinder being ozonized by sparks from Ruhmkorf's coil. This method can be adopted only in hospitals, as skilled hands are required for its management. Fortunately, we have a means of generating ozone from phosphorus, which is ready for use at any moment, and with little trouble. Two sticks of phosphorus, each two inches in length, made very clean by scraping, if covered with oxide, and half covered with water, will yield in an hour sufficient ozone, in a room of 3,000 cubic feet, to be detectable by Schönbein's test in every part, and this even when there is good ventilation. The objection to the production of ozone, that there is not a sufficient bulk of water to absorb the fumes of phosphoric acid, may be obviated by using a vessel containing a larger quantity of water, and by floating the phosphorus at the proper depth upon its surface. The degree of evolution of ozone may be tested by a slip of Schönbein's paper. It is very remarkable that, during the prevalence of cholera in any district, ozone has been observed to be absent in that district; not the smallest trace has been discoverable by the test-papers."—*Medical News and Library*, from *British Medical Journal*.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON: THURSDAY, NOVEMBER 16, 1865.

THE CHOLERA—THE QUESTION OF QUARANTINE.—The question of quarantine is one which comes up with practical force at the present time, when the actual existence of this terrible destroyer among the unfortunate passengers on board a vessel in New York harbor has called for immediate and decisive action on the part of the municipal authorities. When it last visited our shores, it made its first appearance at Staten Island, and but a few days after it broke out at the southern extremity of the United States, at New Orleans. The character of both these places as great commercial centres indicates clearly enough the way in which it was probably admitted to our country. But any other of our sea-coast cities may be the gate of entrance of this disease, and the question of the best method of excluding it becomes, therefore, one of national importance. We do not propose now to discuss the question of the contagiousness or non-contagiousness of cholera. We presume the majority of the most reliable medical authorities accept the theory of its non-contagiousness, and personally we incline to this view. But the question of judicious quarantine is one of a mixed character, not to be decided for an unprofessional community on purely scientific principles. We hold that something in this case should be yielded to the popular apprehension, to

the very general fear which almost always accompanies its appearance.

Is it likely, then, that a rigid exclusion from our ports of all vessels having the cholera among its passengers will have any influence in excluding it altogether, or in materially retarding its appearance on our shores? We answer most emphatically, in our opinion, Yes. A parallel instance presents itself for our guidance in the case of yellow fever. We are of the opinion that with regard to contagiousness and the power of infection these diseases stand about alike. No candid person at the present day can doubt that the rigid exclusion of vessels having yellow fever on board has been the chief reason of its non-appearance during the last four years in those of our Southern ports where it has been practised, and where this disease had been almost an annual visitor before. Once give it a foothold on our shores, and no one can tell how far it may spread; but hold it off at arm's length, and it is harmless for general injury.

Precisely so do we believe it to be with cholera. At any rate, by adopting similar precautions we do the best we can to close our doors against it. The experience of European communities shows how rapidly it spreads when once it breaks out, and no precaution short of actual cruelty should be neglected to avert such a dreadful calamity here. The popular mind is not prepared to look upon this disease with the calmness of a trained physician. The war-hardened veteran may calmly brave the fiery tempest of the battle-field, knowing that a bold front is attended with less actual danger to an advancing host than the panic-stricken retreat of an army with its back to the foe; he nevertheless does not unnecessarily expose his inexperienced soldiers to such a trying ordeal. Just so is it in the battle with this disease. Fear destroys, or prepares for destruction thousands, to whom the sense of security arising from the knowledge that they are not in the immediate neighborhood of it, would be in itself a very powerful protection against it. There can be no doubt that of all epidemics fear predisposes more to this one than to any other, from the direct effect which this emotion has upon the organs which are the principal seat of its attack.

It is greatly to be regretted that the National Government, as such, has no direct authority to institute a quarantine which shall lock up all our borders to the entrance of persons infected with cholera. In the absence of such a power it becomes each State to see to it that for the good of the whole country no possible precaution of this kind shall be omitted. No vessel having cholera on board should be allowed to discharge its passengers until a reasonable time has elapsed for the disease to disappear among them. Every provision should be made for their comfort and security at a distance from any community on shore; the well should be isolated as much as possible from the sick, but too rigid precautions cannot be taken, in our opinion, to keep them from any intercourse with our people until the danger has manifestly passed. It is a grave question how strict a rule should be applied to steamers from foreign ports. Passing so rapidly as they do from Europe to this country, they may possibly land upon our shores passengers from infected places in whom the disease may not manifest itself until after they have landed. It is an important question, which we recommend to the serious consideration of our health officers, on

which at the present moment we do not feel prepared to give an opinion. Sailing vessels, we suppose, as a general rule, are so long in coming from Europe to America, that, if they arrive without the disease on board, or after a reasonable interval after its disappearance if it has been on board, they hardly require detention at quarantine. We certainly should not advocate an indiscriminate detention of all vessels from cholera infected ports. We cannot close our remarks better than with the following summary, which closes a special report on the present epidemic, which we find in the *London Medical Times and Gazette* :—

" The disease has in no single case taken an overland route, but has travelled from coast town to coast town as it has been carried. In this history there is nothing new, but everything that is old and, we had almost said, established. Least of all is there anything capricious about the disorder, as some of our unscientific contemporaries are fond to say. Cholera follows the sower of it, as does wheat or other grain ; and like wheat or other grain it must be carried on from shore to shore, and being carried must, even when landed and distributed, find a field prepared for it, otherwise it will not grow.

" To conclude for this week, the current epidemic tells us, as every preceding epidemic has told us, three demonstrable facts—viz., that for cholera to be diffused over the earth it must have three factors for its cultivation—

" 1. A centre of pollution for its cradle.

" 2. A ship for its transport.

" 3. A number of cities and towns properly prepared for its reception and development."

BERKSHIRE MEDICAL COLLEGE.—The Commencement of the Berkshire Medical College occurred on Wednesday, Nov. 8th. The exercises began at 10½ o'clock, A.M., by reading of the Theses. Prayer was offered by Rev. Dr. Todd, of Pittsfield, after which the President, Dr. H. H. Childs, made a brief but impressive address to the graduating class and conferred the degree of Doctor of Medicine on eighteen candidates, and the honorary degree of Doctor of Medicine upon Prof. Wm. C. Richards, of Pittsfield, and Robert Treat, of Wisconsin. The exercises were concluded by a very able and exceedingly interesting valedictory address, delivered extemporaneously, by Prof. Wm. C. Richards, M.D., who was recently appointed to fill the chair of " Chemistry and Natural History," made vacant by the resignation of Prof. P. A. Chadbourne, M.D.

The following is a list of the names of the graduates and the subjects of their theses:—

| NAMES OF GRADUATES. | THESES. |
|---------------------|--|
| F. S. Abbott, A.M. | <i>Mind and its Influence on Disease.</i> |
| Charles Bliss | <i>Fibrin and its Uses.</i> |
| A. J. Browne | <i>Pyæmia.</i> |
| A. S. Deane | <i>Acute Rheumatism.</i> |
| J. N. Dickson | <i>Modes of Death.</i> |
| G. W. Emery | <i>Variola.</i> |
| Stillman Gitchell | <i>Diagnosis of Pneumonia.</i> |
| W. A. Jones | <i>Hereditary Transmission.</i> |
| F. B. Lawson | (Excused.) |
| Charles McAllister | <i>Abscess.</i> |
| J. H. Page | <i>Necessity of recognizing Imaginary Diseases and Remedies.</i> |

| NAMES OF GRADUATES. | THESES. |
|--------------------------------|--------------------------------------|
| M. J. Powers - - - - - | <i>Puerperal Peritonitis.</i> |
| O. F. Scarle - - - - - | <i>Syphilis.</i> |
| E. H. Sexton, A.M. - - - - - | <i>Evidences of Utero-gestation.</i> |
| H. S. B. Smith, A.M. - - - - - | <i>Phthisis Pulmonalis.</i> |
| Arnold Stedman - - - - - | <i>Tubercular Meningitis.</i> |
| Hiram Temple - - - - - | <i>Asthma.</i> |
| John Winsor - - - - - | <i>Diagnosis.</i> |

We are requested to state that the first number of the *Richmond Medical Journal*, for January next, will appear early in December—to be published monthly, in Richmond, Va., at \$5 per annum. Drs. E. S. Gaillard and W. S. McChesney are to be the Editors and Publishers. The first-named gentleman, it will be recollectcd by our readers, was the author of the interesting Prize Essay on Ozone published in the 71st volume of this JOURNAL. We cordially welcome them into the editorial ranks.

NEW ORLEANS SCHOOL OF MEDICINE.—The sixth annual course of lectures will be opened in this school on the 18th of November. The following constitute the Faculty:—E. D. Fenner, M.D., Professor of Theory and Practice; D. Warren Brickell, M.D., Professor of Obstetrics and Diseases of Women and Children; Samuel Choppin, M.D., Professor of Operative and Clinical Surgery; C. Beard, M.D., Professor of Principles of Surgery; J. L. Crawcour, M.D., Professor of Chemistry and Legal Medicine; Howard Smith, M.D., Professor of Materia Medica and Therapeutics; A. C. Holt, M.D., Professor of Physiology.—*Medical News and Library.*

CHINESE CUSTOMS DURING MENSTRUATION.—At a meeting of the Edinburgh Obstetrical Society, Dr. Keiller stated that a naval officer, now stationed in China, had directed his (Dr. K.'s) attention to the peculiar manner in which the Chinese women were accustomed to treat themselves during menstruation. The gentleman referred to had, in his communication, enclosed a folded sheet of soft and apparently very bibulous paper, which he stated was similar to that generally used in China instead of the ordinary cloth or napkin used by females in this country. Dr. K. read from the letter he had received the following observations regarding the matter:—

" You will be much surprised and puzzled when you receive this letter and its enclosure; so I will at once clear it up. I was talking to Dr. Medows, of Ningpo, about the personal cleanliness of the Chinese being so bad, when he told me it was not so bad as I supposed, and mentioned that in one particular they were more careful than ourselves; that is, with women during their menstrual period, instead of using a cloth as European women do, they use the paper enclosed, which is folded exactly as it is in the envelope, except that I have turned down one end to make it fit the envelope. He tells me a belt is used, and a cloth to go over the paper and keep it in place. The Chinese amas (servants) to European ladies refuse to wash the cloths which they use, and ladies therefore use the paper, and Dr. Medows tells me they prefer it. The Chinese always burn it. I do not know if such paper could be procured at home; but should you think it

worth a trial in Scotland, I will be most happy to send you some, and make arrangements for your receiving a regular supply, should it be adopted to any extent, and no substitute found at home. I have troubled you with this because I believe small things contribute much to the comfort of all, and are more frequently overlooked because it is no one's business. I have so little to do of my own at present that I have to look out for some."—*Edinburgh Medical Journal*.

RUPTURE OF THE ABDOMINAL PARIES AND ISSUE OF A LIVING CHILD.—Dr. Geissler relates the following extraordinary case:—A woman was found in a stable trodden under foot by a bull, and at the point of death. The horn of the animal had passed under the edge of the ribs in the right hypochondrium, and had torn the paries in nearly a transverse direction as far as the left side. The intestines were torn and extruded, and the upper part of the uterus was carried clean away, with the exception of a portion on the right side, to which the placenta was still attached. The os uteri was closed. A full-timed, strong male child was in this way liberated uninjured from the womb, and screamed loudly. The funis was twisted several times round the neck, a piece of torn placenta remaining attached to it.—*Monats für Geburt*—*Medical Times and Gazette*.

TENNESSEE HOSPITAL FOR THE INSANE.—From the Superintendent's Report to the Trustees, we learn that the whole number of patients in the institution August 1, 1862, was 204, of whom 115 were males, and 89 were females. There have been received since and prior to April 1, 1865, 134—104 males, 30 females—making the total number treated within two years and eight months, to have been 338—males, 219, females, 119.

VITAL STATISTICS OF BOSTON.
FOR THE WEEK ENDING SATURDAY, NOVEMBER 11th, 1865.
DEATHS.

| | Males. | Females. | Total. |
|--|--------|----------|--------|
| Deaths during the week | 33 | 39 | 72 |
| Ave. mortality of corresponding weeks for ten years, 1853—1863 | 36.8 | 35.7 | 72.5 |
| Average corrected to increased population | 00 | 00 | 79.09 |
| Death of persons above 90 | 0 | 0 | 0 |

COMMUNICATIONS RECEIVED.—Dr. Cotting's Address and Dr. Rice's Review.—Commencement at the New Hampshire Medical Institution.

PAMPHLETS RECEIVED.—Transactions of the American Ophthalmological Society at the Second Annual Meeting, held in New York, June, 1865.—Documents communicated to the General Assembly of Vermont, by His Excellency the Governor, concerning the spread of the Asiatic Cholera.—Annual Circulars of the Berkshire Medical College and the National Medical College.

DEATHS IN BOSTON for the week ending Saturday noon, November 11th, 72. Males, 33—Females 39. Accident, 3—apoplexy, 2—inflammation of the bowels, 1—disease of the brain, 1—bronchitis, 3—consumption, 14—convulsions, 2—croup, 4—diphtheria, 1—dropsy, 1—dropsy of the brain, 2—dysentery, 4—typhoid fever, 2—gastritis, 1—disease of the heart, 4—hernia, 1—ileus, 1—infantile disease, 2—intussusception, 1—disease of the liver, 1—inflammation of the lungs, 9—measles, 1—old age, 1—paralysis, 1—premature birth, 1—thrush, 1—unknown, 5—whooping cough, 1.

Under 5 years of age, 27—between 5 and 20 years, 10—between 20 and 40 years, 14—between 40 and 60 years, 9—above 60 years, 12. Born in the United States, 54—Ireland, 13—other places, 5.